AMENDATORY SECTION (Amending WSR 02-03-124, filed 1/23/02, effective 3/1/02)

WAC 296-78-56505 Boats and mechanical devices on waters.

- (1) The applicable provisions of the Standard for Fire Protection for Motorcraft, NFPA No. 302-1994, shall be complied with. Prior to starting the boat motor, any spilled fuel shall be removed and vapors shall be exhausted from any area in which they may accumulate.
- (2) The bilge area shall be kept clean and oil, grease, fuel, or highly combustible materials shall not be allowed to accumulate.
- (3) Adequate ventilation equipment shall be provided and used for the bilge area to prevent the accumulation of toxic or explosive gases or vapors.
- (4) Adequate ventilation equipment shall be provided and used for the cabin area on enclosed cabin-type boats to prevent an accumulation of harmful gases or vapors.
- (5) Deck and cabin lighting shall be provided and used where necessary to provide safe levels of illumination aboard boats. Boats operated during the period from sunset to sunrise, or in conditions of restricted visibility, shall display navigation lights as required by the United States Coast Guard. Searchlights or floodlights shall be provided to facilitate safe navigation and to illuminate working or boarding areas adjacent to the craft.
- (6) Decks of pond boats shall be covered with nonslip material. On craft used by workers wearing calked shoes, all areas where the operator or workers must stand or walk shall be made of or be covered with wood or other suitable matting or nonslip material and such covering shall be maintained in good condition.
- (7) Each boat shall be provided with a fire extinguisher and life ring with at least fifty feet of one-fourth inch line attached. ((On log brones, boomscooters, or other small boomboats where all occupants are required to wear life saving devices and a life ring would present a tripping hazard, the life ring may be omitted.))
 - Note: For additional requirements relating to portable fire extinguishers see WAC 296-800-300.
- (8)(a) Along docks, walkways, or other fixed installations on or adjacent to open water more than five feet deep, approved life rings with at least ninety feet of one-fourth inch line attached, shall be provided. The life rings shall be spaced at intervals not to exceed two hundred feet and shall be kept in easily visible and readily accessible locations.

- (b) When employees are assigned work at other casual locations where exposure to drowning exists, at least one approved life ring with at least ninety feet of line attached, shall be provided in the immediate vicinity of the work assigned.
- (c) When work is assigned over water where the vertical drop from the accidental fall would exceed fifty feet, special arrangements shall be made with and approved by the department of labor and industries prior to such assignment.
- (d) Lines attached to life rings on fixed locations shall be at least ninety feet in length, at least one-fourth inch in diameter, and have a minimum breaking strength of five hundred pounds. Similar lines attached to life rings on boats shall be at least fifty feet in length.
- (e) Life rings must be United States Coast Guard approved thirty-inch size.
- (f) Life rings and attached lines shall be provided and maintained to retain their buoyancy and strength.
- (g) Log broncs, boomscooters, and boomboats shall not be loaded with personnel or equipment so as to adversely affect their stability or seaworthiness.
- (h) Boats shall not be operated at an excessive speed or handled recklessly.
- (i) Boat fuel shall be transported and stored in approved containers. Refer to WAC 296-24-58501(19) for definition of approved.

- WAC 296-78-71001 General. (1) Construction when not specifically covered in these standards shall be governed by such other standards adopted by the department of labor and industries as may apply.
- (2) All buildings, docks, tramways, walkways, log dumps and other structures shall be so designed, constructed, and maintained as to provide a safety factor of four. This means that all members shall be capable of supporting four times the maximum load to be imposed. This provision refers to buildings, docks and so forth designed and constructed subsequent to the effective date of these standards and also refers in all cases where either complete or major changes or repairs are made to such buildings, docks, tramways, walkways, log dumps and other structures.
 - (3) Basements on ground floors under mills shall be evenly

surfaced, free from unnecessary obstructions and debris, and provided with lighting facilities in compliance with the requirements of the safety and health core rules, WAC 296-800-210.

- (4) All engines, motors, transmission machinery or operating equipment installed in mill basements or ground floors shall be equipped with standard safeguards for the protection of workers.
- (5) Hazard marking. Physical hazard marking shall be as specified in WAC (($\frac{296-24-135}{296-24-13501}$)) $\frac{296-24-135}{296-24-13501}$ of the general safety and health standards.
- (6) Flooring of buildings, ramps and walkways not subject to supporting motive equipment shall be of not less than two-inch wood planking or material of equivalent structural strength.
- (7) Flooring of buildings, ramps, docks, trestles and other structure required to support motive equipment shall be of not less than full two and one-half inch wood planing or material of equivalent structural strength. However, where flooring is covered by steel floor plates, two inch wood planking or material or equivalent structural strength may be used.
 - (8) Walkways, docks, and platforms.
- (a) Walkways, docks and platforms shall be constructed and maintained in accordance with the requirements of WAC 296-24-735 through 296-24-75011 and WAC 296-800-270.
- (b) Maintenance. Walkways shall be evenly floored and kept in good repair.
- (c) Where elevated platforms are used they shall be equipped with stairways or ladders in accordance with WAC 296-24-765 through 296-24-81013, and WAC 296-800-250 and 296-800-290.

- WAC 296-78-71011 Egress and exit. (1) In all enclosed buildings, means of egress shall be provided in accordance with the provisions of (($\frac{WAC}{V}$ 296-24-550 through 296-24-56531 and)) WAC 296-800-310.
- (2) All swinging doors shall be provided with windows, the bottom of which shall be not more than forty-eight inches above the floor. One window shall be provided for each section of double swinging doors. All such windows shall be of shatter proof or safety glass unless otherwise protected against breakage.

- (3) Outside exits shall open outward. Where sliding doors are used as exits, an inner door not less than two feet six inches by six feet shall be cut inside each of the main doors and arranged to open outward.
- (4) At least two fire escapes or substantial outside stairways, shall be provided for mill buildings where the floor level is more than eight feet above the ground.
- (a) Buildings over one hundred fifty feet in length shall have at least one additional fire escape or substantial outside stairway for each additional one hundred fifty feet of length or fraction thereof.
- (b) Passageways to fire escapes or outside stairways shall be marked and kept free of obstructions at all times.
- (c) Fire protection. The requirements of ((WAC 296 24 585 through 296-24-62003)) Part G2 (Fire Protection) and Part G3 (Fire Suppression Equipment), chapter 296-24 WAC of the general safety and health standard, and WAC 296-800-300 of the safety and health core rules, shall be complied with in providing the necessary fire protection for sawmills.
- (d) Fire drills shall be held at least quarterly and shall be documented.
- (5) Where a doorway opens upon a roadway, railroad track, or upon a tramway or dock over which vehicles travel, a barricade or other safeguard and a warning sign shall be placed to prevent workers from stepping directly into moving traffic.
- (6) Tramways and trestles shall be substantially supported by piling or framed bent construction which shall be frequently inspected and maintained in good repair at all times. Tramways or trestles used both for vehicular and pedestrian traffic shall have a walkway with standard hand rail at the outer edge and shear timber on the inner edge, and shall provide three feet clearance to vehicles. When walkways cross over other thoroughfares, they shall be solidly fenced at the outer edge to a height of 42 inches over such thoroughfares.
- (7) Where tramways and trestles are built over railroads they shall have a vertical clearance of twenty-two feet above the top of the rails. When constructed over carrier docks or roads, they shall have a vertical clearance of not less than six feet above the drivers foot rest on the carrier, and in no event shall this clearance be less than twelve feet from the surface of the lower roadway or dock.
- (8) Walkways (either temporary or permanent) shall be not less than twenty-four inches wide and two inches thick, nominal size, securely fastened at each end. When such walkways are used on an incline the angle shall not be greater than twenty degrees from horizontal.
- (9) Walkways from the shore or dock to floats or barges shall be securely fastened at the shore end only and clear space provided for the other end to adjust itself to the height of the

water.

(10) Cleats of one by four inch material shall be fastened securely across walkways at uniform intervals of eighteen inches whenever the grade is sufficient to create a slipping hazard.

AMENDATORY SECTION (Amending WSR 96-17-056, filed 8/20/96, effective 10/15/96)

WAC 296-78-835 Vehicles. (1) Vehicles.

- (a) Scope. Vehicles shall include all mobile equipment normally used in sawmill, planing mill, storage, shipping, and yard operations, including log sorting yards.
- (b) Lift trucks. Lift truck shall be designed, constructed, maintained and operated in accordance with the requirements of WAC 296-24-230 through 296-24-23035 of the general safety and health standards.
- (c) Carriers. Drive chains on lumber carriers shall be adequately guarded to prevent contact at the pinch points.
- (d)(i) Lumber carriers shall be so designed and constructed that the operator's field of vision shall not be unnecessarily restricted.
- (ii) Carriers shall be provided with ladders or equivalent means of access to the operator's platform or cab.
 - (e) Lumber hauling trucks.
- (i) On trucks where the normal operating position is ahead of the load in the direction of travel, the cab shall be protected by a barrier at least as high as the cab. The barrier shall be capable of stopping the weight of the load capacity of the vehicle if the vehicle were to be stopped suddenly while traveling at its normal operating speed. The barrier shall be constructed in such a manner that individual pieces of a normal load will not go through openings in the barrier.
- (ii) Stakes, stake pockets, racks, tighteners, and binders shall provide a positive means to secure the load against any movement during transit.
- (iii) Where rollers are used, at least two shall be equipped with locks which shall be locked when supporting loads during transit.
- (2) Warning signals and spark arrestors. All vehicles shall be equipped with audible warning signals and where practicable shall have spark arrestors.
- (3) Flywheels, gears, sprockets and chains and other exposed parts that constitute a hazard to workers shall be enclosed in standard guards.
 - (4) All vehicles operated after dark or in any area of

reduced visibility shall be equipped with head lights and backup lights which adequately illuminate the direction of travel for the normal operating speed of the vehicle. The vehicle shall also be equipped with tail lights which are visible enough to give sufficient warning to surrounding traffic at the normal traffic operating speed.

- (5) All vehicles operated in areas where overhead hazards exist shall be equipped with an overhead guard for the protection of the operator.
- (6) Where vehicles are so constructed and operated that there is a possibility of the operator being injured by backing into objects, a platform guard shall be provided and so arranged as not to hinder the exit of the driver.
- (7) Trucks, lift trucks and carriers shall not be operated at excessive rates of speed. When operating on tramways or docks more than six feet above the ground or lower level they shall be limited to a speed of not more than twelve miles per hour. When approaching blind corners they shall be limited to four miles per hour.
- (8) Vehicles shall not be routed across principal thoroughfares while employees are going to or from work unless pedestrian lanes are provided.
- (a) Railroad tracks and other hazardous crossings shall be plainly posted and traffic control devices (American National Standard D8.1 1967 for Railroad-Highway Grade Crossing Protection) should be utilized.
- (b) Restricted overhead clearance. All areas of restricted side or overhead clearance shall be plainly marked.
- (c) Pickup and unloading points. Pickup and unloading points and paths for lumber packages on conveyors and transfers and other areas where accurate spotting is required, shall be plainly marked and wheel stops provided where necessary.
- (d) Aisles, passageways, and roadways. Aisles, passageways, and roadways shall be sufficiently wide to provide safe side clearance. One-way aisles may be used for two-way traffic if suitable turnouts are provided.
- (9) Where an operator's vision is impaired by the vehicle or load it is carrying, he shall move only on signal from someone so stationed as to have a clear view in the direction the vehicle is to travel.
- (10) Lift trucks shall be equipped, maintained and operated in compliance with the requirements of the general safety and health standard, WAC 296-24-230 through 296-24-23035.
- (11) Load limits. No vehicle shall be operated with loads exceeding its safe load capacity.
- (12) Vehicles with internal combustion engines shall not be operated in enclosed buildings or buildings with ceilings less than sixteen feet high unless the buildings have ventilation adequate to maintain air quality as required by the general

occupational health standard, chapter 296-62 WAC.

- (13) Vehicles shall not be refueled while motor is running. Smoking or open flames shall not be allowed in the refueling area.
- (14) No employee other than trained operators or mechanics shall start the motor of, or operate any log or lumber handling vehicle.
- (15) All vehicles shall be equipped with brakes capable of holding and controlling the vehicle and capacity load upon any grade or incline over which they may operate.
 - (16) Unloading equipment and facilities.
- (a) Machines used for hoisting, unloading, or lowering logs shall be equipped with brakes capable of controlling or holding the maximum load in midair.
- (b) The lifting cylinders of all hydraulically operated log handling machines, or where the load is lifted by wire rope, shall be equipped with a positive device for preventing the uncontrolled lowering of the load or forks in case of a failure in the hydraulic system.
- (c) A limit switch shall be installed on powered log handling machines to prevent the lift arms from traveling too far in the event the control switch is not released in time.
- (d) When forklift-type machines are used to load trailers, a means of securing the loading attachment to the fork shall be installed and used.
- (e) A-frames and similar log unloading devices shall have adequate height to provide safe clearance for swinging loads and to provide for adequate crotch lines and spreader bar devices.
- (f) Log handling machines used to stack logs or lift loads above operator's head shall be equipped with overhead protection.
- (g) Unloading devices shall be equipped with a horn or other plainly audible signaling device.
- (h) Movement of unloading equipment shall be coordinated by audible or hand signals when operator's vision is impaired or operating in the vicinity of other employees.

Lift trucks regularly used for transporting peeler blocks or cores shall have tusks or a similar type hold down device to prevent the blocks or cores from rolling off the forks.

- (17) Where spinners are used on steering wheels, they shall be of the automatic retracting type or shall be built into the wheel in such a manner as not to extend above the plane surface of the wheel. Vehicles equipped with positive antikickback steering are exempted from this requirement.
- (18) Mechanical stackers and unstackers shall have all gears, sprockets and chains exposed to the contact of workers, fully enclosed by guards as required by WAC 296-78-710 of this chapter.
 - (19) Manually operated control switches shall be properly

identified and so located as to be readily accessible to the operator. Main control switches shall be so designed that they can be locked in the open position.

- (20) Employees shall not stand or walk under loads being lifted or moved. Means shall be provided to positively block the hoisting platform when employees must go beneath the stacker or unstacker hoist.
- (21) No person shall ride any lift truck or lumber carrier unless a suitable seat is provided, except for training purposes.
- (22) Unstacking machines shall be provided with a stopping device which shall at all times be accessible to at least one employee working on the machine.
- (23) Floor of unstacker shall be kept free of broken stickers and other debris. A bin or frame shall be provided to allow for an orderly storage of stickers.
- (24) Drags or other approved devices shall be provided to prevent lumber from running down on graders.
- (25) Liquified petroleum gas storage and handling. Storage and handling of liquified petroleum gas shall be in accordance with the requirements of WAC 296-24-475 through 296-24-47517 of the general safety and health standards.
- (26) Flammable liquids. Flammable liquids shall be stored and handled in accordance with WAC 296-24-330 through 296-24-33019 of the general safety and health standards.
- (27) Guarding side openings. The hoistway side openings at the top level of the stacker and unstacker shall be protected by enclosures of standard railings.
- (28) Guarding hoistway openings. When the hoist platform or top of the load is below the working platform, the hoistway openings shall be guarded.
- (29) Guarding lower landing area. The lower landing area of stackers and unstackers shall be guarded by enclosures that prevent entrance to the area or pit below the hoist platform. Entrances should be protected by electrically interlocked gates which, when open, will disconnect the power and set the hoist brakes. When the interlock is not installed, other positive means of protecting the entrance shall be provided.
- (30) Lumber lifting devices. Lumber lifting devices on all stackers shall be designed and arranged so as to minimize the possibility of lumber falling from such devices.
- (31) Inspection. At the start of each work shift, equipment operators shall inspect the equipment they will use for evidence of failure or incipient failure. Equipment found to have defects which might affect the operating safety shall not be used until the defects are corrected.
- (32) Cleaning pits. Safe means of entrance and exit shall be provided to permit cleaning of pits.
 - (33) Preventing entry to hazardous area. Where the return

of trucks from unstacker to stacker is by mechanical power or gravity, adequate signs, warning devices, or barriers shall be erected to prevent entry into the hazardous area.